Application No. 10/725,952 -2 - Docket No.: 10248.70015US01

Confirmation No.: 3968

In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1-25. (Canceled)

- 26. (Previously Presented) A method for stimulating hematopoietic cells in vitro comprising: culturing the hematopoietic cells in the absence of exogenous cytokines and exogenous stromal cells and in the presence of an amount of a dipeptidylpeptidase type IV (DP IV) inhibitor sufficient to stimulate the hematopoietic cells.
- 27. (Previously Presented) The method of claim 26, wherein the hematopoietic cells are hematopoietic stem cells, early progenitor cells, or hematopoietic precursor cells.
- 28. (Previously Presented) The method of claim 26, wherein the hematopoietic cells are umbilical cord blood cells or bone marrow cells.
- 29. (Previously Presented) The method of claim 26, wherein the DP IV inhibitor is a LysboroPro monomer, a Pro-boroPro monomer, a Val-boroPro monomer or a Lys-boroPro conjugate.
- 30. (Previously Presented) The method of claim 26, wherein the DP IV inhibitor is an immobilized DP IV inhibitor.
- 31. (Previously Presented) The method of claim 30, wherein the immobilized DP IV inhibitor comprises the DP IV inhibitor attached to an immobilization structure that is a tissue culture vessel.
- 32. (Previously Presented) The method of claim 30, wherein the immobilized DP IV inhibitor comprises the DP IV inhibitor attached to an immobilization structure that is a particle.

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(Canceled) 33. - 35.